

RECEIVED  
NOV 13 2007  
PRO

# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

### PIEDMONT REGIONAL OFFICE

4949-A Cox Road, Glen Allen, Virginia 23060

(804) 527-5020 Fax (804) 527-5106

[www.deq.virginia.gov](http://www.deq.virginia.gov)

June 21, 2007

L. Preston Bryant, Jr.  
Secretary of Natural Resources

David K. Paylor  
Director

Gerard Seeley, Jr.  
Regional Director

Stephen O. Spence  
Environmental Services Manager  
Central Service Area - VDOC  
Nottoway Correctional Center  
P.O. Box 488  
Burkeville, Va. 23922

RE: Application for VPDES Permit Reissuance VA0023426  
Pocahontas Correctional Unit #13 Wastewater Treatment Plant

Dear Mr. Spence:

This letter is to remind you that your referenced permit will expire on June 5, 2008. If you wish to continue discharging, you must reapply for the VPDES permit. The State Water Control Board's VPDES Permit Regulation requires that we receive a complete application at least 180 days before the existing permit expires. The deadline for submitting the application is December 5, 2007. Early submissions are welcome and will better enable us to complete processing before permit expiration. The instructions and application forms are enclosed.

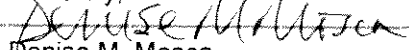
Also enclosed is a list of all the substances for which water quality standards exist. Your permit requires you to submit a shorter list by December 5, 2007. Please analyze for ALL the parameters in the list attached to this letter. This list includes 35 additional criteria which were adopted in February 2004. To assist us in screening for appropriate limits, please include in your application testing for all of these parameters, unless you submit previous test results for all of these parameters and certify that nothing has changed in your operation that would change the wastewater characterization.

Please note that the effluent testing required in Application Form 2A Section A.12. and B.6. consists of a minimum of 3, 24-hr composites or grabs, depending on the parameter. The VPDES permit calls for 4-hr. composites, so special samples will have to be taken in order to submit 24-hr. composites. Two of the samples must be separated by no fewer than 4 months and no more than 8 months. Please refer to Appendix A, pages 12 and 13 of the Form 2A Instructions.

The General Assembly recently changed the fee structure for environmental permits. These changes eliminate the application fee for reissuance of existing VPDES permits and establish an annual maintenance fee for each permitted facility. The next maintenance fee is to be due by October 1, 2007. The maintenance fee for this facility is expected to be **\$1200** each year. You will be billed directly by DEQ's Finance Office for this fee.

If you have any questions concerning the requirements for your permit, please let me know.

Sincerely,

  
Denise M. Mosca  
Environmental Specialist II

PUBLIC NOTICE BILLING INFORMATION FORM

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9 VAC 25-31-290. C. 2.

Agent/Department to be billed:

Agent/Department to be billed: Dept. of Corrections  
Owner: Dept. of Corrections  
Applicant's Address: VA Dept. of Corrections  
6900 Atmore Drive  
Richmond, VA 23225  
Agent's Telephone No: 804-674-3303  
Authorizing Agent: Stephen O. Spence  
Signature

Facility Name: DOC Pocahontas Correctional WWTP  
Permit No: VA0023426

**Please return to:**

Denise Mosca  
DEQ – Piedmont Regional Office  
4949 A-Cox Road  
Glen Allen, VA 23060  
804-527-5027

Fax Number: 804-527-5106

October 11, 2007

DEQ – Piedmont Regional Office  
Denise M. Mosca  
Environmental Specialist II  
4949-A Cox Road  
Glen Allen, VA 23060

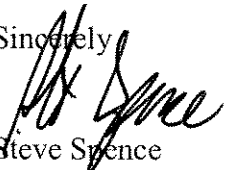
Re: Sampling Frequency Reduction

Dear Ms. Mosca

I would like to request a reduction in the frequency of sampling for the Permit VA0023426. The plant operates extremely well and has consistently met limits (excluding copper and zinc, which we are adding tertiary treatment in December 2007 to resolve this) since it began operating the second week of June 2004.

Should you have any questions, please call at 434-767-5543 ext. 5319.

Sincerely



Steve Spence  
Environmental Services Manager  
Central Service Area  
Department of Corrections

Cc: Tim Newton

VPDES Permit Application Addendum

1. Entity to whom the permit is to be issued:

Department of Corrections

Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. Is this facility located within city or town boundaries? Y ☒ N

3. Provide the tax map parcel number for the land where the discharge is located.

4. For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?

755621152500000

2 acre

5. What is the design average effluent flow of this facility? 0.065 MGD

For industrial facilities, provide the max. 30-day average production level, include units:

In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Y ☒ N

If "Yes", please identify the other flow tiers (in MGD) or production levels:

Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?

6. Nature of operations generating wastewater:

Sequential Batch Reactor

100 % of flow from domestic connections/sources

Number of private residences to be served by the treatment works:

0 % of flow from non-domestic connections/sources

7. Mode of discharge: ☐ Continuous ☒ Intermittent ☐ Seasonal

Describe frequency and duration of intermittent or seasonal discharges:

8. Identify the characteristics of the receiving stream at the point just above the facility's discharge point:

☒ Permanent stream, never dry

☐ Intermittent stream, usually flowing, sometimes dry

☐ Ephemeral stream, wet-weather flow, often dry

☐ Effluent-dependent stream, usually or always dry without effluent flow

☐ Lake or pond at or below the discharge point

☐ Other:

9. Approval Date(s):

O & M Manual

2-20-05

Sludge/Solids Management Plan

2-20-05

Have there been any changes in your operations or procedures since the above approval dates? Y ☒ N

FACILITY NAME AND PERMIT NUMBER:

CVCCW VA0023426

Form Approved 1/14/99  
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:**

All treatment works must complete questions A.1 through A.8 of this Basic Application Information Packet.

**A.1. Facility Information.**Facility Name Central Virginia Correctional Center for WomenMailing Address 6900 Courthouse Road  
Chesterfield, VA 23832Contact Person Jim Good \ Don BickhardtTitle Environmental Services Unit OperatorTelephone Number (804) 796-4277 Ext. 154Facility Address Route 604  
(not P.O. Box) Chesterfield, VA 23832**A.2. Applicant Information.** If the applicant is different from the above, provide the following:Applicant Name Virginia Department of CorrectionsMailing Address 2892 Schutt Road  
BurkevilleContact Person Stephen O. SpenceTitle Environmental Services Unit ManagerTelephone Number (434) 767-5543 Ext. 5319

Is the applicant the owner or operator (or both) of the treatment works?

☒ owner ☒ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☐ facility ☒ applicant**A.3. Existing Environmental Permits.** Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).NPDES VA0023426

PSD \_\_\_\_\_

UIC \_\_\_\_\_

Other \_\_\_\_\_

RCRA \_\_\_\_\_

Other \_\_\_\_\_

**A.4. Collection System Information.** Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>CVCCW Unit #13</u>	<u>272</u>	<u>separate sanitary sewer</u>	<u>DOC</u>
<u>Chesterfield Div.</u>	<u>83</u>	<u>separate sanitary sewer</u>	<u>DOC</u>
<u>Highway Shop</u>	<u>17</u>	<u>separate sanitary sewer</u>	<u>VDOT</u>
<b>Total population served</b>	<u>372</u>		

## FACILITY NAME AND PERMIT NUMBER:

C VCCW

VA 0023426

Form Approved 1/14/99  
OMB Number 2040-0086**A.5. Indian Country.**

- a. Is the treatment works located in Indian Country?  
☐ Yes ☒ No
- b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?  
☐ Yes ☒ No

**A.6. Flow.** Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12<sup>th</sup> month of "this year" occurring no more than three months prior to this application submittal.

a.	Design flow rate	<u>0.065</u>	mgd
		<u>Two Years Ago</u>	<u>Last Year</u>
b.	Annual average daily flow rate	<u>0.0305</u>	<u>0.0294</u>
			<u>This Year</u>
c.	Maximum daily flow rate	<u>0.0517</u>	<u>0.0420</u>
			<u>0.0488</u>

**A.7. Collection System.** Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

- ☒ Separate sanitary sewer 100 %
- ☐ Combined storm and sanitary sewer \_\_\_\_\_ %

**A.8. Discharges and Other Disposal Methods.**

- a. Does the treatment works discharge effluent to waters of the U.S.? ☒ Yes ☐ No
- If yes, list how many of each of the following types of discharge points the treatment works uses:
- |      |  |          |
|------|--|----------|
| i.   | Discharges of treated effluent                           | <u>1</u> |
| ii.  | Discharges of untreated or partially treated effluent    | <u>0</u> |
| iii. | Combined sewer overflow points                           | <u>0</u> |
| iv.  | Constructed emergency overflows (prior to the headworks) | <u>0</u> |
| v.   | Other _____  | _____    |
- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? ☐ Yes ☒ No
- If yes, provide the following for each surface impoundment:
- Location: \_\_\_\_\_
- Annual average daily volume discharge to surface impoundment(s) \_\_\_\_\_ mgd
- Is discharge ☐ continuous or ☐ intermittent?
- c. Does the treatment works land-apply treated wastewater? ☐ Yes ☒ No
- If yes, provide the following for each land application site:
- Location: \_\_\_\_\_
- Number of acres: \_\_\_\_\_
- Annual average daily volume applied to site: \_\_\_\_\_ mgd
- Is land application ☐ continuous or ☐ intermittent?
- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? ☐ Yes ☒ No

## FACILITY NAME AND PERMIT NUMBER:

CVCC W

VA0023426

Form Approved 1/14/99  
OMB Number 2040-0086

## WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

## A.9. Description of Outfall.

- a. Outfall number 001
- b. Location 6900 Courthouse Road 23822  
(City or town, if applicable) (Zip Code)  
Chesterfield VA  
(County) (State)  
77W 82' 74" 77W 49" 38"  
(Latitude) (Longitude)
- c. Distance from shore (if applicable) Bank discharge ft.
- d. Depth below surface (if applicable) n/a ft.
- e. Average daily flow rate 0.031 mgd
- f. Does this outfall have either an intermittent or a periodic discharge?  
☒ Yes ☐ No (go to A.9.g.)  
If yes, provide the following information:  
Number of times per year discharge occurs: 2920  
Average duration of each discharge: 60 min.  
Average flow per discharge: 0.039 mgd  
Months in which discharge occurs: 12
- g. Is outfall equipped with a diffuser?  
☐ Yes ☒ No

## A.10. Description of Receiving Waters.

- a. Name of receiving water Unnamed tributary of Swift Creek
- b. Name of watershed (if known) James River Middle  
United States Soil Conservation Service 14-digit watershed code (if known): 02080205030H38
- c. Name of State Management/River Basin (if known): James River Middle  
United States Geological Survey 8-digit hydrologic cataloging unit code (if known): JM79
- d. Critical low flow of receiving stream (if applicable)  
acute n/a cfs chronic n/a cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): n/a mg/l of CaCO<sub>3</sub>

## FACILITY NAME AND PERMIT NUMBER:

CVCCW

VA0023426

Form Approved 1/14/99  
OMB Number 2040-0086

## A.11. Description of Treatment

- a. What levels of treatment are provided? Check all that apply.

☐ Primary☒ Secondary☐ Advanced☐ Other. Describe: \_\_\_\_\_

- b. Indicate the following removal rates (as applicable):

Design BOD5 removal or Design CBOD5 removal 95 %Design SS removal 85 %

Design P removal \_\_\_\_\_ %

Design N removal \_\_\_\_\_ %

Other \_\_\_\_\_ %

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe:

Ultraviolet

If disinfection is by chlorination is dechlorination used for this outfall?

☐ Yes☒ No

- d. Does the treatment plant have post aeration?

☒ Yes☐ No

**A.12 Effluent Testing Information.** All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.5	s.u.			
pH (Maximum)	7.4	s.u.			
Flow Rate	0.037	MGD	0.038	MGD	3
Temperature (Winter)	24	C	24	C	3
Temperature (Summer)	27	C	25	C	3

\* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Conc.	Units	Number of Samples		

## CONVENTIONAL AND NON CONVENTIONAL COMPOUNDS

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD5	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	CBOD5	<2.0	mg/l	<2.0	mg/l	3	5210 B	2
FECAL COLIFORM		3	MPN	1.7	MPN	3	Colilert	MPN
TOTAL SUSPENDED SOLIDS (TSS)		4.4	mg/l	2.3	mg/l	3	25401 D	0.5



CVCCW

FACILITY NAME AND PERMIT NUMBER:

Unit #13 VA0023426

Form Approved 1/14/99  
OMB Number 2040-0086

## BASIC APPLICATION INFORMATION

### PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate  $\geq 0.1$  mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

n/a gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within  $\frac{1}{4}$  mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where the hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ☐ Yes ☐ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name:

Mailing Address:

Telephone Number:

( )

Responsibilities of Contractor:

B.5. Scheduled improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

- Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

☐ Yes

☐ No

**FACILITY NAME AND PERMIT NUMBER:**

Unit #13 VA 00 23426

Form Approved 1/14/99  
OMB Number 2040-0086

c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM/DD/YYYY	Actual Completion MM/DD/YYYY
- Begin Construction	/ /	/ /
- End Construction	/ /	/ /
- Begin Discharge	/ /	/ /
- Attain Operational Level	/ /	/ /

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☐ No

Describe briefly:

**B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).**

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide effluent testing for the following listed parameters and those required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum effluent testing data must be based on at least three pollutant scans, preferably represent several seasons, and must be no more than four and on-half years old.

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NON CONVENTIONAL COMPOUNDS							
AMMONIA (as N)	.11	mg/l	.11	mg/l	3	SM 4500-NH3	0.1
CHLORINE (TOTAL RESIDUAL, TRC)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
DISSOLVED OXYGEN	7.9	mg/l	7.7	mg/l	3	SM - 4500 OG	0.1
TOTAL KJELDAHL NITROGEN (TKN)	.87	mg/l	.9	mg/l	3	EPA 351.2	0.2
NITRATE PLUS NITRITE NITROGEN	4.8	mg/l	3.38	mg/l	3	EPA 300.0	0.1
OIL and GREASE	<10	mg/l	<10	mg/l	3	EPA 1664A	10.0
PHOSPHORUS (Total)	2.48	mg/l	3.12	mg/l	3	SM 4500-PE	0.05
TOTAL DISSOLVED SOLIDS (TDS)	347	mg/l	350	mg/l	3	SM 2540C	10
OTHER	-	-	-	-	-	-	-

**END OF PART B.**

**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

CVCCW

FACILITY NAME AND PERMIT NUMBER:

Unit #13

VA 0023426

Form Approved 1/14/99  
OMB Number 2040-0086

## BASIC APPLICATION INFORMATION

### PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ Basic Application Information packet

Supplemental Application Information packet:

☒ Part D (Expanded Effluent Testing Data)

☐ Part E (Toxicity Testing: Biomonitoring Data)

☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

☐ Part G (Combined Sewer Systems)

### ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Stephen O. Spence \ Environmental Services Unit Manager

Signature Stephen O. Spence

Telephone number (434) 767-5543 Ext. 5319

Date signed 11-8-2007

Upon request of the permitting authority, you must submit any other information necessary to assure wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

**SEND COMPLETED FORMS TO:**



2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

## Certificate of Analysis

### *Preliminary Report*

#### Laboratory Order ID 07080423

Client Name: Central Virginia Correctional Unit 13  
6900 Courthouse Road  
Chesterfield, VA 23832

Date Received: August 29, 2007  
Date Issued: September 11, 2007

Submitted To: Jim Good

Project Number: NA

Client Site I.D.:

Purchase Order: NA

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-001

Date/Time Sampled: 08/28/07 09:30

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
Oil and Grease	EPA1664A	< 10 mg/L	10.0	09/05/07 9:56	VLG
Total Recoverable Phenolics	EPA420.1	< 0.05 mg/L	0.05	09/05/07 9:50	RPF



2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

## Certificate of Analysis

### Preliminary Report

**Laboratory Order ID 07080423**

Client Name: Central Virginia Correctional Unit 13  
6900 Courthouse Road  
Chesterfield, VA 23832

Date Received: August 29, 2007  
Date Issued: September 11, 2007

Submitted To: Jim Good

Project Number: NA

Client Site I.D.:

Purchase Order: NA

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-002

Date/Time Sampled (Start/Stop): 08/28/07 00:01 to 08/28/07 23:59

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
Chromium, Hexavalent	EPA218.4/SM3500Cr D	< 0.01 mg/L	0.010	08/29/07 15:15	JCW
Azobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Mirex	SW8081A	< 0.1 ug/L	0.100	09/05/07 14:31	RMW
PCB as Aroclor 1016	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
PCB as Aroclor 1221	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
PCB as Aroclor 1232	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
PCB as Aroclor 1242	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
PCB as Aroclor 1248	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
PCB as Aroclor 1254	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
PCB as Aroclor 1260	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
4,4-DDD	EPA608	< 0.1 ug/L	0.100	09/05/07 14:31	RMW
4,4-DDE	EPA608	< 0.04 ug/L	0.040	09/05/07 14:31	RMW
4,4-DDT	EPA608	< 0.12 ug/L	0.120	09/05/07 14:31	RMW
Aldrin	EPA608	< 0.02 ug/L	0.020	09/05/07 14:31	RMW
alpha-BHC	EPA608	< 0.02 ug/L	0.020	09/05/07 14:31	RMW
beta-BHC	EPA608	< 0.05 ug/L	0.050	09/05/07 14:31	RMW
Chlordane	EPA608	< 1 ug/L	1.00	09/05/07 14:31	RMW
delta-BHC	EPA608	< 0.05 ug/L	0.050	09/05/07 14:31	RMW
Dieldrin	EPA608	< 0.02 ug/L	0.020	09/05/07 14:31	RMW
Endosulfan I	EPA608	< 0.1 ug/L	0.100	09/05/07 14:31	RMW
Endosulfan II	EPA608	< 0.04 ug/L	0.040	09/05/07 14:31	RMW
Endosulfan sulfate	EPA608	< 0.5 ug/L	0.500	09/05/07 14:31	RMW
Endrin	EPA608	< 0.1 ug/L	0.100	09/05/07 14:31	RMW
Endrin aldehyde	EPA608	< 0.2 ug/L	0.200	09/05/07 14:31	RMW
gamma-BHC (Lindane)	EPA608	< 0.02 ug/L	0.020	09/05/07 14:31	RMW
Heptachlor	EPA608	< 0.05 ug/L	0.050	09/05/07 14:31	RMW
Heptachlor epoxide	EPA608	< 0.2 ug/L	0.200	09/05/07 14:31	RMW
Methoxychlor	EPA608	< 2 ug/L	2.0	09/05/07 14:31	RMW
Toxaphene	EPA608	< 3 ug/L	3.0	09/05/07 14:31	RMW
2-Chlorophenol	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
2,4-Dichlorophenol	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV



2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

## Certificate of Analysis

### Preliminary Report

**Laboratory Order ID 07080423**

Client Name: Central Virginia Correctional Unit 13  
6900 Courthouse Road  
Chesterfield, VA 23832

Date Received: August 29, 2007  
Date Issued: September 11, 2007

Submitted To: Jim Good

Project Number: NA

Client Site I.D.:

Purchase Order: NA

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-002

Date/Time Sampled (Start/Stop): 08/28/07 00:01 to 08/28/07 23:59

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
2,4-Dimethylphenol	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
4,6-Dinitro-2-methylphenol	EPA625	< 50 ug/L	50	09/04/07 12:24	JHV
2,4-Dinitrophenol	EPA625	< 50 ug/L	50	09/04/07 12:24	JHV
Pentachlorophenol	EPA625	< 20 ug/L	20	09/04/07 12:24	JHV
Phenol	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
2,4,6-Trichlorophenol	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Acenaphthene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Anthracene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Benzo (a) anthracene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Benzo (b) fluoranthene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Benzo (k) fluoranthene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Benzo (a) pyrene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Butyl benzyl phthalate	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
bis (2-Chloroethyl) ether	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
bis (2-Chloroisopropyl) ether	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Chrysene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Dibenz (a,h) anthracene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
DI-n-butyl phthalate	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
1,2-Dichlorobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
1,3-Dichlorobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
1,4-Dichlorobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Diethyl phthalate	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Dimethyl phthalate	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
2,4-Dinitrotoluene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
bis (2-Ethylhexyl) phthalate	EPA625	21 ug/L	10	09/04/07 12:24	JHV
Fluoranthene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Fluorene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Hexachlorobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Hexachlorobutadiene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Hexachlorocyclopentadiene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Hexachloroethane	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Indeno (1,2,3-cd) pyrene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV



2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

## Certificate of Analysis

### Preliminary Report

**Laboratory Order ID 07080423**

Client Name: Central Virginia Correctional Unit 13  
6900 Courthouse Road  
Chesterfield, VA 23832

Date Received: August 29, 2007  
Date Issued: September 11, 2007

Submitted To: Jim Good

Project Number: NA

Client Site I.D.:

Purchase Order: NA

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-002

Date/Time Sampled (Start/Stop): 08/28/07 00:01 to 08/28/07 23:59

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
Isophorone	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Nitrobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
N-Nitrosodimethylamine	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
N-Nitrosodiphenylamine	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
N-Nitrosodi-N-propylamine	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Pyrene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
1,2,4-Trichlorobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Benzidine	EPA625	< 50 ug/L	50	09/04/07 12:24	JHV
3,3-Dichlorobenzidine	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
2-Chloronaphthalene	SW8270C	< 10 ug/L	10.0	09/04/07 12:24	JHV
Ammonia	SM4500-NH3 F	0.11 mg/L	0.10	09/06/07 11:40	RPF
Nitrate	EPA300.0	2.90 mg/L	0.10	08/29/07 15:09	RPF
Nitrite	EPA300.0	0.26 mg/L	0.01	08/29/07 15:09	RPF
Phosphorus, Total	SM4500-P E	2.96 mg/L	0.05	09/04/07 15:30	VLG
Sulfide	SM4500-S F	< 1 mg/L	1.0	08/29/07 13:45	RPF
TDS	SM2540C	344 mg/L	10	09/02/07 15:10	JPV
TKN	EPA351.2	0.8 mg/L	0.2	08/31/07 13:25	RPF
Tributyltin	85-3295	< 0.05 ug/L	0.05	09/06/07 13:27	Sub-UL



2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

## Certificate of Analysis

### Preliminary Report

**Laboratory Order ID 07080423**

Client Name: Central Virginia Correctional Unit 13  
6900 Courthouse Road  
Chesterfield, VA 23832

Date Received: August 29, 2007  
Date Issued: September 11, 2007

Submitted To: Jim Good

Project Number: NA

Client Site I.D.:

Purchase Order: NA

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-003

Date/Time Sampled: 08/28/07 09:35

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
Antimony, Dissolved	EPA200.9	< 0.005 mg/L	0.005	09/07/07 16:27	DMH
Cadmium, Dissolved	EPA200.9	< 0.0003 mg/L	0.0003	09/05/07 14:37	DMH
Chromium, Dissolved	EPA200.9	< 0.001 mg/L	0.001	09/07/07 13:52	DMH
Copper, Dissolved	EPA200.9	0.023 mg/L	0.003	09/05/07 13:51	DMH
Lead, Dissolved	EPA200.9	< 0.002 mg/L	0.002	09/04/07 12:17	DMH
Mercury, Dissolved	EPA245.1	< 0.0002 mg/L	0.0002	08/31/07 12:39	DMH
Nickel, Dissolved	EPA200.9	< 0.003 mg/L	0.003	09/05/07 11:38	DMH
Selenium, Dissolved	EPA200.9	< 0.003 mg/L	0.003	09/06/07 20:13	DMH
Silver, Dissolved	EPA200.9	< 0.0005 mg/L	0.0005	09/07/07 11:05	DMH
Thallium, Dissolved	EPA200.9	< 0.002 mg/L	0.002	09/04/07 12:10	DMH
Zinc, Dissolved	EPA200.7	0.019 mg/L	0.010	08/31/07 14:19	CGT





2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

## Certificate of Analysis

### Preliminary Report

**Laboratory Order ID 07080423**

Client Name: Central Virginia Correctional Unit 13  
6900 Courthouse Road  
Chesterfield, VA 23832

Date Received: August 29, 2007  
Date Issued: September 11, 2007

Submitted To: Jim Good

Project Number: NA

Client Site I.D.:

Purchase Order: NA

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-004

Date/Time Sampled: 08/28/07 09:38

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
Acrylonitrile	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Acrolein	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Vinyl chloride	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Bromomethane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
1,1-Dichloroethylene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Methylene chloride	EPA624	< 20 ug/L	20.0	08/31/07 13:52	DMB
trans-1,2-Dichloroethylene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Chloroform	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Carbon tetrachloride	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Benzene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
1,2-Dichloroethane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Trichloroethylene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
1,2-Dichloropropane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Bromodichloromethane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
2-Chloroethyl vinyl ether	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
cis-1,3-Dichloropropene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Toluene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
trans-1,3-Dichloropropene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
1,1,2-Trichloroethane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Tetrachloroethylene (PCE)	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Dibromochloromethane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Chlorobenzene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Ethylbenzene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Bromoform	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
1,1,2,2-Tetrachloroethane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-005

Date/Time Sampled: 08/29/07 02:55

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
Chloride	EPA300.0	63 mg/L	1.0	09/06/07 12:42	RPF



2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

## Certificate of Analysis

### Final Report

**Laboratory Order ID 07080423**

Client Name: Central Virginia Correctional Unit 13  
6900 Courthouse Road  
Chesterfield, VA 23832

Date Received: August 29, 2007  
Date Issued: October 03, 2007

Submitted To: Jim Good

Project Number: NA

Client Site I.D.:

Purchase Order: NA

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-002

Date/Time Sampled (Start/Stop): 08/28/07 00:01 to 08/28/07 23:59

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
Chromium, Hexavalent	EPA218.4/SM3500Cr D	< 0.01 mg/L	0.010	08/29/07 15:15	JCW
Demeton-o	EPA622	< 5 ug/L	5.00	09/10/07 20:26	Sub-TA-FL
Chlorpyrifos	EPA622	< 5 ug/L	5.00	09/10/07 20:26	Sub-TA-FL
Methyl parathion	EPA622	< 5 ug/L	5.00	09/10/07 20:26	Sub-TA-FL
Azinophos	EPA622	< 5 ug/L	5.00	09/10/07 20:26	Sub-TA-FL
Malathion	EPA622	< 5 ug/L	5.00	09/10/07 20:26	Sub-TA-FL
Ethyl parathion	EPA622	< 5 ug/L	5.00	09/10/07 20:26	Sub-TA-FL
Azobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Mirex	SW8081A	< 0.1 ug/L	0.100	09/05/07 14:31	RMW
PCB as Aroclor 1016	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
PCB as Aroclor 1221	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
PCB as Aroclor 1232	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
PCB as Aroclor 1242	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
PCB as Aroclor 1248	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
PCB as Aroclor 1254	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
PCB as Aroclor 1260	EPA608	< 5 ug/L	5.0	09/05/07 14:31	RMW
4,4-DDD	EPA608	< 0.1 ug/L	0.100	09/05/07 14:31	RMW
4,4-DDE	EPA608	< 0.04 ug/L	0.040	09/05/07 14:31	RMW
4,4-DDT	EPA608	< 0.12 ug/L	0.120	09/05/07 14:31	RMW
Aldrin	EPA608	< 0.02 ug/L	0.020	09/05/07 14:31	RMW
alpha-BHC	EPA608	< 0.02 ug/L	0.020	09/05/07 14:31	RMW
beta-BHC	EPA608	< 0.05 ug/L	0.050	09/05/07 14:31	RMW
Chlordane	EPA608	< 1 ug/L	1.00	09/05/07 14:31	RMW
delta-BHC	EPA608	< 0.05 ug/L	0.050	09/05/07 14:31	RMW
Dieldrin	EPA608	< 0.02 ug/L	0.020	09/05/07 14:31	RMW
Endosulfan I	EPA608	< 0.1 ug/L	0.100	09/05/07 14:31	RMW
Endosulfan II	EPA608	< 0.04 ug/L	0.040	09/05/07 14:31	RMW
Endosulfan sulfate	EPA608	< 0.5 ug/L	0.500	09/05/07 14:31	RMW
Endrin	EPA608	< 0.1 ug/L	0.100	09/05/07 14:31	RMW
Endrin aldehyde	EPA608	< 0.2 ug/L	0.200	09/05/07 14:31	RMW
gamma-BHC (Lindane)	EPA608	< 0.02 ug/L	0.020	09/05/07 14:31	RMW



2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

## Certificate of Analysis

### Final Report

**Laboratory Order ID 07080423**

Client Name: Central Virginia Correctional Unit 13  
6900 Courthouse Road  
Chesterfield, VA 23832

Date Received: August 29, 2007  
Date Issued: October 03, 2007

Submitted To: Jim Good

Project Number: NA

Client Site I.D.:

Purchase Order: NA

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-002

Date/Time Sampled (Start/Stop): 08/28/07 00:01 to 08/28/07 23:59

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
Heptachlor	EPA608	< 0.05 ug/L	0.050	09/05/07 14:31	RMW
Heptachlor epoxide	EPA608	< 0.2 ug/L	0.200	09/05/07 14:31	RMW
Methoxychlor	EPA608	< 2 ug/L	2.0	09/05/07 14:31	RMW
Toxaphene	EPA608	< 3 ug/L	3.0	09/05/07 14:31	RMW
2-Chlorophenol	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
2,4-Dichlorophenol	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
2,4-Dimethylphenol	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
4,6-Dinitro-2-methylphenol	EPA625	< 50 ug/L	50	09/04/07 12:24	JHV
2,4-Dinitrophenol	EPA625	< 50 ug/L	50	09/04/07 12:24	JHV
Pentachlorophenol	EPA625	< 20 ug/L	20	09/04/07 12:24	JHV
Phenol	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
2,4,6-Trichlorophenol	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Acenaphthene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Anthracene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Benzo (a) anthracene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Benzo (b) fluoranthene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Benzo (k) fluoranthene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Benzo (a) pyrene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Butyl benzyl phthalate	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
bis (2-Chloroethyl) ether	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
bis (2-Chloroisopropyl) ether	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Chrysene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Dibenz (a,h) anthracene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Di-n-butyl phthalate	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
1,2-Dichlorobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
1,3-Dichlorobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
1,4-Dichlorobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Diethyl phthalate	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Dimethyl phthalate	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
2,4-Dinitrotoluene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
bis (2-Ethylhexyl) phthalate	EPA625	21 ug/L	10	09/04/07 12:24	JHV
Fluoranthene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV



2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

## Certificate of Analysis

### Final Report

### Laboratory Order ID 07080423

Client Name: Central Virginia Correctional Unit 13  
6900 Courthouse Road  
Chesterfield, VA 23832

Date Received: August 29, 2007  
Date Issued: October 03, 2007

Submitted To: Jim Good

Project Number: NA

Client Site I.D.:

Purchase Order: NA

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-002

Date/Time Sampled (Start/Stop): 08/28/07 00:01 to 08/28/07 23:59

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
Fluorene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Hexachlorobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Hexachlorobutadiene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Hexachlorocyclopentadiene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Hexachloroethane	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Indeno (1,2,3-cd) pyrene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Isophorone	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Nitrobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
N-Nitrosodimethylamine	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
N-Nitrosodiphenylamine	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
N-Nitrosodi-N-propylamine	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Pyrene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
1,2,4-Trichlorobenzene	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
Benzidine	EPA625	< 50 ug/L	50	09/04/07 12:24	JHV
3,3-Dichlorobenzidine	EPA625	< 10 ug/L	10	09/04/07 12:24	JHV
2-Chloronaphthalene	SW8270C	< 10 ug/L	10.0	09/04/07 12:24	JHV
Ammonia	SM4500-NH3 F	0.11 mg/L	0.10	09/06/07 11:40	RPF
Nitrate	EPA300.0	2.90 mg/L	0.10	08/29/07 15:09	RPF
Nitrite	EPA300.0	0.26 mg/L	0.01	08/29/07 15:09	RPF
Phosphorus, Total	SM4500-P E	2.96 mg/L	0.05	09/04/07 15:30	VLG
Sulfide	SM4500-S F	< 1 mg/L	1.0	08/29/07 13:45	RPF
TDS	SM2540C	344 mg/L	10	09/02/07 15:10	JPV
TKN	EPA351.2	0.8 mg/L	0.2	08/31/07 13:25	RPF
Tributyltin	85-3295	< 0.05 ug/L	0.05	09/06/07 13:27	Sub-UL



2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

## Certificate of Analysis

### Final Report

### Laboratory Order ID 07080423

Client Name: Central Virginia Correctional Unit 13  
6900 Courthouse Road  
Chesterfield, VA 23832

Date Received: August 29, 2007  
Date Issued: October 03, 2007

Submitted To: Jim Good

Project Number: NA

Client Site I.D.:

Purchase Order: NA

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-003

Date/Time Sampled: 08/28/07 09:35

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
Antimony, Dissolved	EPA200.9	< 0.005 mg/L	0.005	09/07/07 16:27	DMH
Cadmium, Dissolved	EPA200.9	< 0.0003 mg/L	0.0003	09/05/07 14:37	DMH
Chromium, Dissolved	EPA200.9	< 0.001 mg/L	0.001	09/07/07 13:52	DMH
Copper, Dissolved	EPA200.9	0.023 mg/L	0.003	09/05/07 13:51	DMH
Lead, Dissolved	EPA200.9	< 0.002 mg/L	0.002	09/04/07 12:17	DMH
Mercury, Dissolved	EPA245.1	< 0.0002 mg/L	0.0002	08/31/07 12:39	DMH
Nickel, Dissolved	EPA200.9	< 0.003 mg/L	0.003	09/05/07 11:38	DMH
Selenium, Dissolved	EPA200.9	< 0.003 mg/L	0.003	09/06/07 20:13	DMH
Silver, Dissolved	EPA200.9	< 0.0005 mg/L	0.0005	09/07/07 11:05	DMH
Thallium, Dissolved	EPA200.9	< 0.002 mg/L	0.002	09/04/07 12:10	DMH
Zinc, Dissolved	EPA200.7	0.019 mg/L	0.010	08/31/07 14:19	CGT



2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

## Certificate of Analysis

### Final Report

### Laboratory Order ID 07080423

Client Name: Central Virginia Correctional Unit 13  
6900 Courthouse Road  
Chesterfield, VA 23832

Date Received: August 29, 2007  
Date Issued: October 03, 2007

Submitted To: Jim Good

Project Number: NA

Client Site I.D.:

Purchase Order: NA

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-004

Date/Time Sampled: 08/28/07 09:38

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
Acrolein	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Acrylonitrile	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Vinyl chloride	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Bromomethane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
1,1-Dichloroethylene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Methylene chloride	EPA624	< 20 ug/L	20.0	08/31/07 13:52	DMB
trans-1,2-Dichloroethylene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Chloroform	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Carbon tetrachloride	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Benzene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
1,2-Dichloroethane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Trichloroethylene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
1,2-Dichloropropane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Bromodichloromethane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
2-Chloroethyl vinyl ether	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
cis-1,3-Dichloropropene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Toluene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
trans-1,3-Dichloropropene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
1,1,2-Trichloroethane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Tetrachloroethylene (PCE)	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Dibromochloromethane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Chlorobenzene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Ethylbenzene	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
Bromoform	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB
1,1,2,2-Tetrachloroethane	EPA624	< 10 ug/L	10.0	08/31/07 13:52	DMB

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-005

Date/Time Sampled: 08/29/07 02:55

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
Chloride	EPA300.0	63 mg/L	1.0	09/06/07 12:42	RPF



2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

## Certificate of Analysis

### Final Report

### Laboratory Order ID 07080423

Client Name: Central Virginia Correctional Unit 13  
6900 Courthouse Road  
Chesterfield, VA 23832

Date Received: August 29, 2007  
Date Issued: October 03, 2007

Submitted To: Jim Good

Project Number: NA

Client Site I.D.:

Purchase Order: NA

Sample I.D.: Plant EFF

Laboratory Sample I.D.: 07080423-006

Date/Time Sampled: 08/28/07 09:33

Parameter	Method	Sample Results	Rep Limit	Analysis Date/Time	Analyst
Cyanide	Kelada-01	< 0.01 mg/L	0.01	09/04/07 14:15	RPF

  
Ted Soyars

Laboratory Manager

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Air Water & Soil Labs, Inc  
Address : 2109 North Hamilton Street  
Richmond, Virginia 23230

Contact: Ms. Georgianna Wenrich  
Project: Radiochemistry Analytical

Report Date: September 20, 2007

Client Sample ID: 07080423-002  
Sample ID: 192788001  
Matrix: Waste Water  
Collect Date: 28-AUG-07 23:59  
Receive Date: 30-AUG-07  
Collector: Client

Project: AWSL00107  
Client ID: AWSL001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Rad Gamma Spec Analysis</b>												
<i>GammaSpec, Gamma, Liquid (Standard List)</i>												
Actinium-228	U	ND	+/-9.21	15.3	20.0	pCi/L		MJH	09/19/07	1017	680726	1
Americium-241	U	ND	+/-10.6	16.1	25.0	pCi/L						
Antimony-124	U	ND	+/-5.28	8.56	5.00	pCi/L						
Antimony-125	U	ND	+/-5.59	9.45	10.0	pCi/L						
Barium-133	U1	ND	+/-8.67	4.77	5.00	pCi/L						
Barium-140	U	ND	+/-26.7	39.8	30.0	pCi/L						
Beryllium-7	U	ND	+/-25.9	39.2	50.0	pCi/L						
Bismuth-212	U	ND	+/-23.4	28.0	50.0	pCi/L						
Bismuth-214	U	ND	+/-8.04	9.30	10.0	pCi/L						
Cerium-139	U	ND	+/-2.35	3.17	5.00	pCi/L						
Cerium-141	U	ND	+/-5.97	8.55	10.0	pCi/L						
Cerium-144	U	ND	+/-15.4	24.7	50.0	pCi/L						
Cesium-134	U	ND	+/-2.00	3.39	5.00	pCi/L						
Cesium-136	U	ND	+/-7.62	13.6	15.0	pCi/L						
Cesium-137	U	ND	+/-2.27	3.13	5.00	pCi/L						
Chromium-51	U	ND	+/-28.1	43.1	50.0	pCi/L						
Cobalt-56	U	ND	+/-2.96	4.23	5.00	pCi/L						
Cobalt-57	U	ND	+/-1.87	3.22	5.00	pCi/L						
Cobalt-58	U	ND	+/-2.08	3.24	10.0	pCi/L						
Cobalt-60	U	ND	+/-2.11	3.88	5.00	pCi/L						
Europium-152	U	ND	+/-6.89	11.0	20.0	pCi/L						
Europium-154	U	ND	+/-4.68	9.08	20.0	pCi/L						
Europium-155	U	ND	+/-8.10	13.3	20.0	pCi/L						
Iridium-192	U	ND	+/-2.60	3.99	10.0	pCi/L						
Iron-59	U	ND	+/-5.16	8.95	10.0	pCi/L						
Lead-210	U	ND	+/-248	391	750	pCi/L						
Lead-212	U	ND	+/-4.77	7.17	15.0	pCi/L						
Lead-214	U	ND	+/-5.26	9.03	10.0	pCi/L						
Manganese-54	U	ND	+/-2.05	3.54	5.00	pCi/L						
Mercury-203	U	ND	+/-2.87	5.20	5.00	pCi/L						
Neodymium-147	U	ND	+/-52.8	87.2	100	pCi/L						
Neptunium-239	U	ND	+/-15.3	22.3	25.0	pCi/L						
Niobium-94	U	ND	+/-1.81	3.30	5.00	pCi/L						



# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

## Certificate of Analysis

Company : Air Water & Soil Labs, Inc  
Address : 2109 North Hamilton Street  
Richmond, Virginia 23230

Contact: Ms. Georgianna Wenrich  
Project: Radiochemistry Analytical

Report Date: September 20, 2007

Client Sample ID: 07080423-002  
Sample ID: 192788001

Project: AWSL00107  
Client ID: AWSL001

Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	-------------	----	----	-------	----	---------	------	------	-------	--------

### Rad Gamma Spec Analysis

*GammaSpec, Gamma, Liquid (Standard List)*

Niobium-95	U	ND	+/-3.68	4.52	5.00	pCi/L						
Potassium-40	U	ND	+/-31.5	34.7	100	pCi/L						
Promethium-144	U	ND	+/-2.59	3.73	5.00	pCi/L						
Promethium-146	U	ND	+/-2.73	4.90	5.00	pCi/L						
Radium-228	U	ND	+/-9.21	15.3	20.0	pCi/L						
Ruthenium-106	U	ND	+/-19.6	29.7	50.0	pCi/L						
Silver-110m	U	ND	+/-2.20	3.43	5.00	pCi/L						
Sodium-22	U	ND	+/-1.68	3.34	5.00	pCi/L						
Thallium-208	U	ND	+/-4.50	4.07	10.0	pCi/L						
Thorium-230	U	ND	+/-5580	1350	20.0	pCi/L						
Thorium-234	U	ND	+/-193	135	250	pCi/L						
Tin-113	U	ND	+/-2.90	4.84	10.0	pCi/L						
Uranium-235	U	ND	+/-18.2	25.4	50.0	pCi/L						
Uranium-238	U	ND	+/-193	135	250	pCi/L						
Yttrium-88	U	ND	+/-2.18	4.24	10.0	pCi/L						
Zinc-65	U	ND	+/-3.92	6.57	10.0	pCi/L						
Zirconium-95	U	ND	+/-4.88	7.08	10.0	pCi/L						

### Rad Gas Flow Proportional Counting

*GFPC, Gross A/B, liquid*

Alpha	U	ND	+/-2.32	4.20	5.00	pCi/L	HAK	09/08/07	1446	666837	2
Beta		8.61	+/-3.18	4.65	5.00	pCi/L	B				

*GFPC, Sr90, liquid*

Strontium-90	U	ND	+/-0.856	1.93	2.00	pCi/L	SLN1	09/11/07	1846	681394	3
--------------	---	----	----------	------	------	-------	------	----------	------	--------	---

### Rad Liquid Scintillation Analysis

*LSC, Tritium Dist, Liquid*

Tritium	U	ND	+/-123	275	700	pCi/L	BXF1	09/12/07	2335	682205	4
---------	---	----	--------	-----	-----	-------	------	----------	------	--------	---

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 901.1	
2	EPA 900.0	
3	EPA 905.0 Modified	
4	EPA 906.0 Modified	

Surrogate/Tracer recovery	Test	Result	Nominal	Recovery %	Acceptable Limits
---------------------------	------	--------	---------	------------	-------------------

## GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

### Certificate of Analysis

Company : Air Water & Soil Labs, Inc  
Address : 2109 North Hamilton Street  
Richmond, Virginia 23230

Contact: Ms. Georgianna Wenrich  
Project: **Radiochemistry Analytical**

Report Date: September 20, 2007

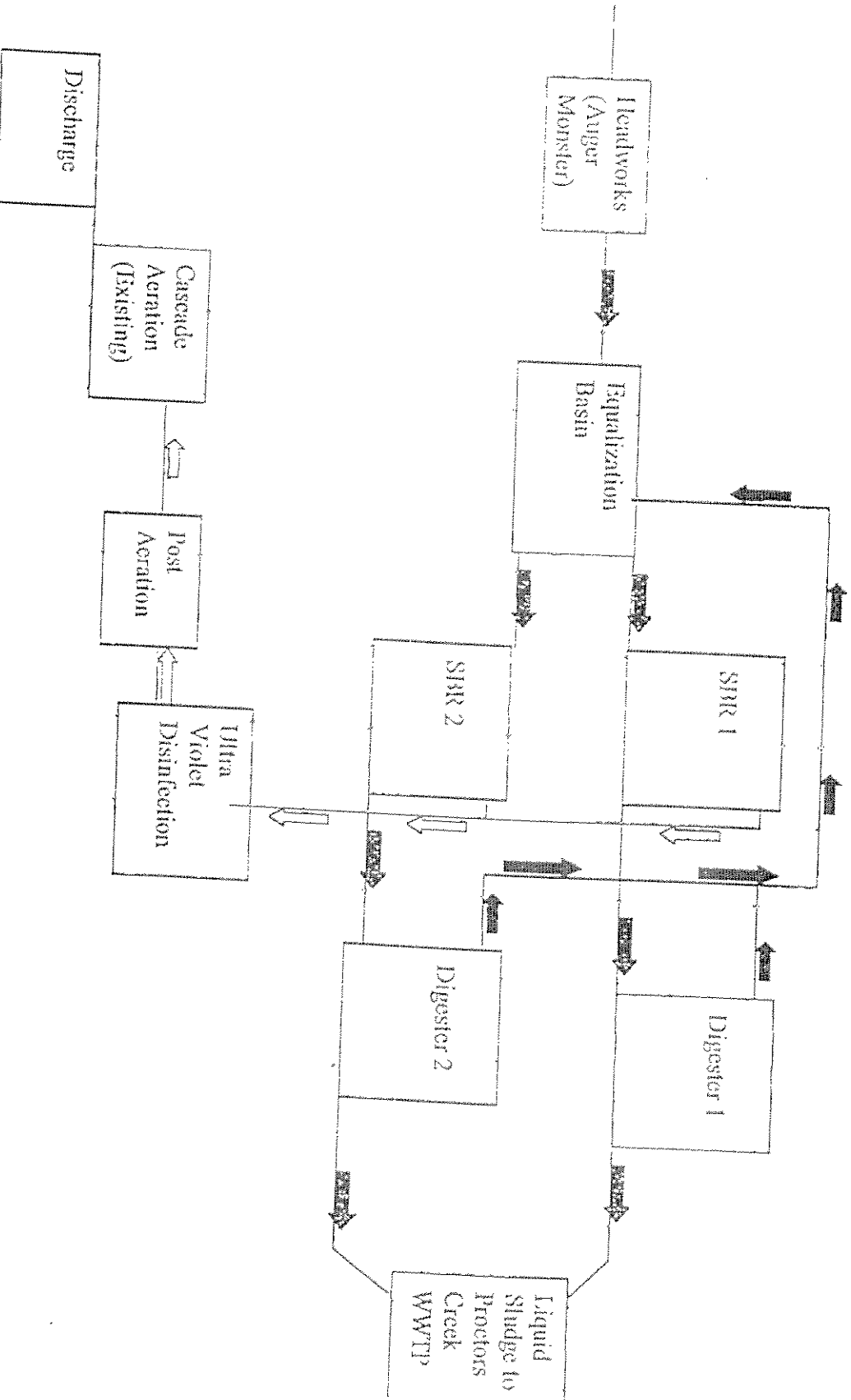
Client Sample ID: 07080423-002  
Sample ID: 192788001

Project: AWSL00107  
Client ID: AWSL001

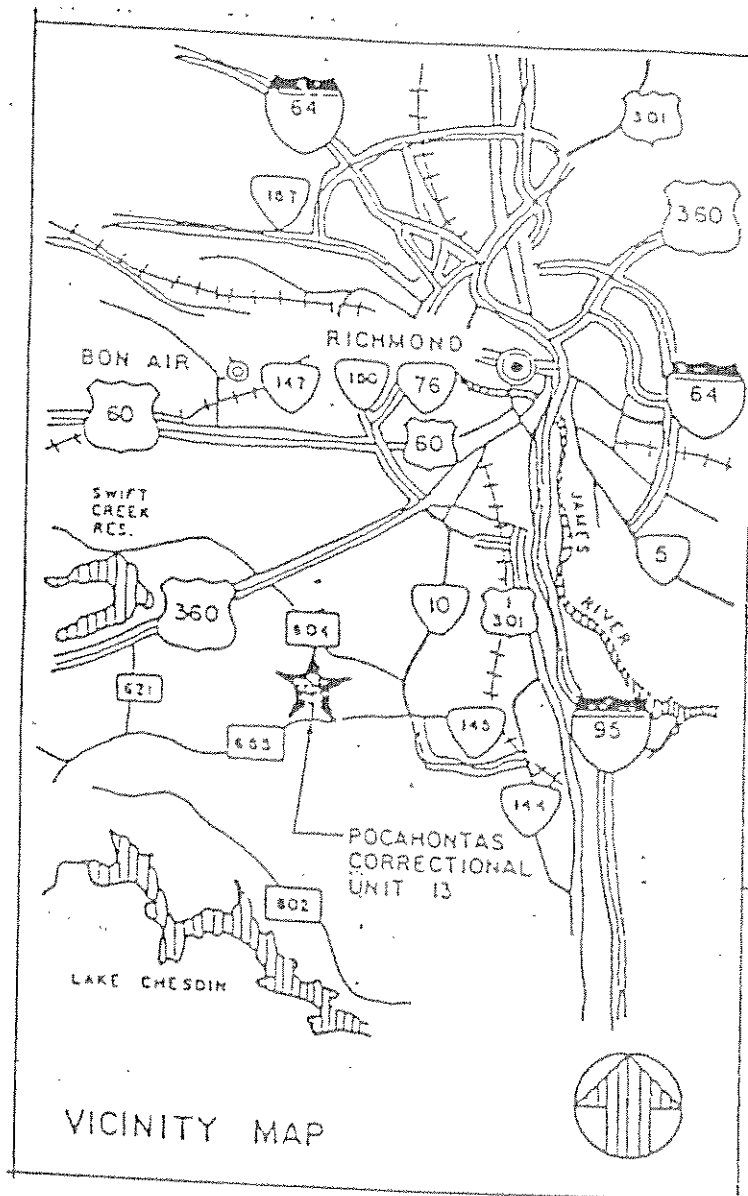
Parameter	Qualifier	Result	Uncertainty	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Surrogate/Tracer recovery	Test					Result	Nominal	Recovery%	Acceptable Limits			
Strontium Carrier	GFPC, Sr90, liquid							72	(25%-125%)			

# Pocahontas Wastewater Treatment Plant Flow Diagram

0.065 MGD Plant







FACILITY NAME:

CVCCW

VPDES PERMIT NUMBER:

VA0023426

VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

SCREENING INFORMATION

This application is divided into sections. Sections A pertain to all applicants. The applicability of Sections B, C and D depend on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1. All applicants must complete Section A (General Information).

2. Does this facility generate sewage sludge? ☒ Yes ☐ No

Does this facility derive a material from sewage sludge? ☐ Yes ☒ No

If you answered Yes to either, complete Section B (Generation Of Sewage Sludge Or Preparation Of A Material Derived From Sewage Sludge).

3. Does this facility apply sewage sludge to the land? ☐ Yes ☒ No

Is sewage sludge from this facility applied to the land? ☒ Yes ☐ No

If you answer No to all above, skip Section C.

If you answered Yes to either, answer the following three questions:

a. Does the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions?  
☐ Yes ☒ No

b. Is sewage sludge from this facility placed in a bag or other container for sale or give-away for application to the land? ☐ Yes ☒ No

c. Is sewage sludge from this facility sent to another facility for treatment or blending? ☒ Yes ☐ No

If you answered No to all three, complete Section C (Land Application Of Bulk Sewage Sludge).

If you answered Yes to a, b or c, skip Section C.

4. Do you own or operate a surface disposal site? ☐ Yes ☒ No

If Yes, complete Section D (Surface Disposal).

FACILITY NAME:

CVCCW

VPDES PERMIT NUMBER:

VA 0023426

SECTION A. GENERAL INFORMATION

All applicants must complete this section.

1. Facility Information.

- a. Facility name: Central Virginia Correctional Center for Women
- b. Contact person: Jim Good \ Don Bickhardt  
Title: Environmental Services Unit Operators  
Phone: ( 804 ) 796-4277 Ext. 154
- c. Mailing address:  
Street or P.O. Box: 6900 Courthouse Road  
City or Town: Chesterfield State: VA Zip: 23832
- d. Facility location:  
Street or Route #: Route 604  
County: Chesterfield  
City or Town: Chesterfield State: VA Zip: 23832
- e. Is this facility a Class I sludge management facility? Yes X No
- f. Facility design flow rate: 0.065 mgd
- g. Total population served: 372
- h. Indicate the type of facility:  
X Publicly owned treatment works (POTW)  
     Privately owned treatment works  
     Federally owned treatment works  
     Blending or treatment operation  
     Surface disposal site  
X Other (describe): State Owned

2. Applicant Information. If the applicant is different from the above, provide the following:

- a. Applicant name: Virginia Department of Corrections
- b. Mailing address:  
Street or P.O. Box: P.O. Box 488  
City or Town: Burkeville State: VA Zip: 23922
- c. Contact person:  
Title: Stephen O. Spence  
  
Phone: ( 434 ) 767-5543 ext. 5319
- d. Is the applicant the owner or operator (or both) of this facility?  
X owner X operator
- d. Should correspondence regarding this permit be directed to the facility or the applicant?  
     facility X applicant

3. Permit Information.

- a. Facility's VPDES permit number (if applicable):
- b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:  
Permit Number: VA0020699 Type of Permit: VPDES - Powhatan WWTP Sludge Disposal Permit

4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country? Yes X No If yes, describe:

FACILITY NAME:

CVCCW

VPDES PERMIT NUMBER:

VA 0023426

5. Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility:
- Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
  - Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.
6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.
7. Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? ☒ Yes ☐ No  
If yes, provide the following for each contractor (attach additional pages if necessary).  
Name: Old Dominion Septic Service Inc.  
Mailing address:  
Street or P.O. Box: 200 South Providence Road  
City or Town: Richmond State: VA Zip: 23236  
Phone: ( 804 ) 272-7343  
Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge:
- If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s). **Contractor hauls the aerobically digested liquid sludge to the City of Richmond for disposal.**
8. Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic	42.33	10/9/2007	SW 6010B	<38.5
Cadmium	42.33	10/9/2007	SW 6010B	<38.5
Chromium	42.33	10/9/2007	SW 6010B	<38.5
Copper	1490	10/9/2007	SW 6010B	<38.5
Lead	42.33	10/9/2007	SW 6010B	<38.5
Mercury	1.19	10/9/2007	SW 7471A	<0.615
Molybdenum	42.3	10/9/2007	SW 6010B	<38.5
Nickel	42.3	10/9/2007	SW 6010B	<38.5
Selenium	211	10/9/2007	SW 6010B	192
Zinc	274	10/9/2007	SW 6010B	<38.5

9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of the application you have completed and are submitting:
- ☒ Section A (General Information)  
☒ Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)  
☐ Section C (Land Application of Bulk Sewage Sludge)  
☐ Section D (Surface Disposal)



FACILITY NAME:

CV CCW

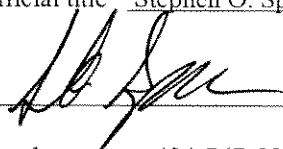
VPDES PERMIT NUMBER:

VA 0023426

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Stephen O. Spence /ESU Manager

Signature



Date Signed

11-8-2007

Telephone number

434-767-5543 ext. 5319

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

FACILITY NAME:

CVCCW

VAD0023426  
VPDES PERMIT NUMBER:

SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION  
OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1. Amount Generated On Site.  
Total dry metric tons per 365-day period generated at your facility: 6 dry metric tons
2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.
  - a. Facility name:
  - b. Contact Person:  
Title:  
Phone ( )
  - c. Mailing address:  
Street or P.O. Box:  
City or Town: State: Zip:
  - d. Facility Address:  
(not P.O. Box)
  - e. Total dry metric tons per 365-day period received from this facility: dry metric tons
  - f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:
3. Treatment Provided at Your Facility.
  - a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?  
Class A ☒ Class B ☐ Neither or unknown ☐
  - b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Aerobic digestion for 38% reduction of volatile solids.
  - c. Which vector attraction reduction option is met for the sewage sludge at your facility?  
☒ Option 1 (Minimum 38 percent reduction in volatile solids)  
☐ Option 2 (Anaerobic process, with bench-scale demonstration)  
☐ Option 3 (Aerobic process, with bench-scale demonstration)  
☐ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)  
☐ Option 5 (Aerobic processes plus raised temperature)  
☒ Option 6 (Raise pH to 12 and retain at 11.5)  
☐ Option 7 (75 percent solids with no unstabilized solids)  
☐ Option 8 (90 percent solids with unstabilized solids)  
☐ None or unknown
  - d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge: Blended with lime stabilization at sludge holding facility.
  - e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above:
4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One of Vector Attraction Reduction Options 1-8 (EQ Sludge).  
(If sewage sludge from your facility does not meet all of these criteria, skip Question 4.)
  - a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:  
n/a dry metric tons
  - b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?  
Yes No

FACILITY NAME:

CVCCW

VPDES PERMIT NUMBER:

VA 0023426

5. Sale or Give-Away in a Bag or Other Container for Application to the Land.  
(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)

- a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: n/a dry metric tons
- b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

6. Shipment Off Site for Treatment or Blending.

(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)

- a. Receiving facility name: Powhatan Correctional Center
- b. Facility contact: Randy Wilson  
Title: Environmental Services Unit Supervisor  
Phone: ( 804 ) 784-3551 Ext. 2299
- c. Mailing address:  
Street or P.O. Box: State Farm  
City or Town: State Farm State: VA Zip: 23160
- d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: 125 dry metric tons
- e. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:  
Permit Number: VA 0020699 Type of Permit: VPDES Permit
- f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? X Yes    No  
Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?  
   Class A    X Class B    Neither or unknown  
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge: Add lime to stabilize and blend.
- g. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? X Yes    No  
Which vector attraction reduction option is met for the sewage sludge at the receiving facility?  
   Option 1 (Minimum 38 percent reduction in volatile solids)  
   Option 2 (Anaerobic process, with bench-scale demonstration)  
X Option 3 (Aerobic process, with bench-scale demonstration)  
   Option 4 (Specific oxygen uptake rate for aerobically digested sludge)  
   Option 5 (Aerobic processes plus raised temperature)  
X Option 6 (Raise pH to 12 and retain at 11.5)  
   Option 7 (75 percent solids with no unstabilized solids)  
   Option 8 (90 percent solids with unstabilized solids)  
   None unknown  
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge:
- h. Does the receiving facility provide any additional treatment or blending not identified in f or g above?  
   Yes X No  
If yes, describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:
- i. If you answered yes to f., g or h above, attach a copy of any information you provide to the receiving facility

FACILITY NAME:

CVCCW

VA 0023426  
VPDES PERMIT NUMBER:

to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.

- j. Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? ☐ Yes ☒ No  
If yes, provide a copy of all labels or notices that accompany the product being sold or given away.
- k. Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? ☒ Yes ☐ No. If no, provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.  
Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week and the times of the day sewage sludge will be transported.

Attached

7. Land Application of Bulk Sewage Sludge.

(Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6; complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)

- a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: 15 dry metric tons
- b. Do you identify all land application sites in Section C of this application? ☒ Yes ☐ No  
If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).
- c. Are any land application sites located in States other than Virginia? ☐ Yes ☒ No  
If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.
- d. Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).

**Applied to state owned land only. Do not have any close landowners.**

8. Surface Disposal.

(Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.)

- a. Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal sites: \_\_\_\_\_ dry metric tons
- b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?  
☐ Yes ☐ No  
If no, answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary.
- c. Site name or number:
- d. Contact person:  
Title:  
Phone: (    )  
Contact is: ☐ Site Owner ☐ Site operator
- e. Mailing address:  
Street or P.O. Box:  
City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_
- f. Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site: \_\_\_\_\_ dry metric tons
- g. List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site:  
Permit Number: \_\_\_\_\_ Type of Permit: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. Incineration.

(Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)





**Start:** 6900 Courthouse Rd  
Chesterfield, VA 23832-5309, US

**End:** [1900-2011] State Farm Rd  
Maidens, VA 23102, US

**Notes:**

Only text visible within note field will print.



8:30 AM is probably one of the **safest**  
times of day to drive.

It's time for

**Driver's Ed for the Real World.**

[Click here](#)

MAPQUEST



**Directions**

**Distance**

**Total Est. Time:** 33 minutes

**Total Est. Distance:** 29.64 miles



**1:** Start out going NORTH on COURTHOUSE RD / VA-604 N toward NEWBYS BRIDGE RD. 0.4 miles



**2:** Merge onto VA-288 N / WORLD WAR II VETERANS MEMORIAL HWY via the ramp on the LEFT toward US-360. 18.0 miles



**3:** Merge onto VA-6 W toward GOOCHLAND. 10.9 miles



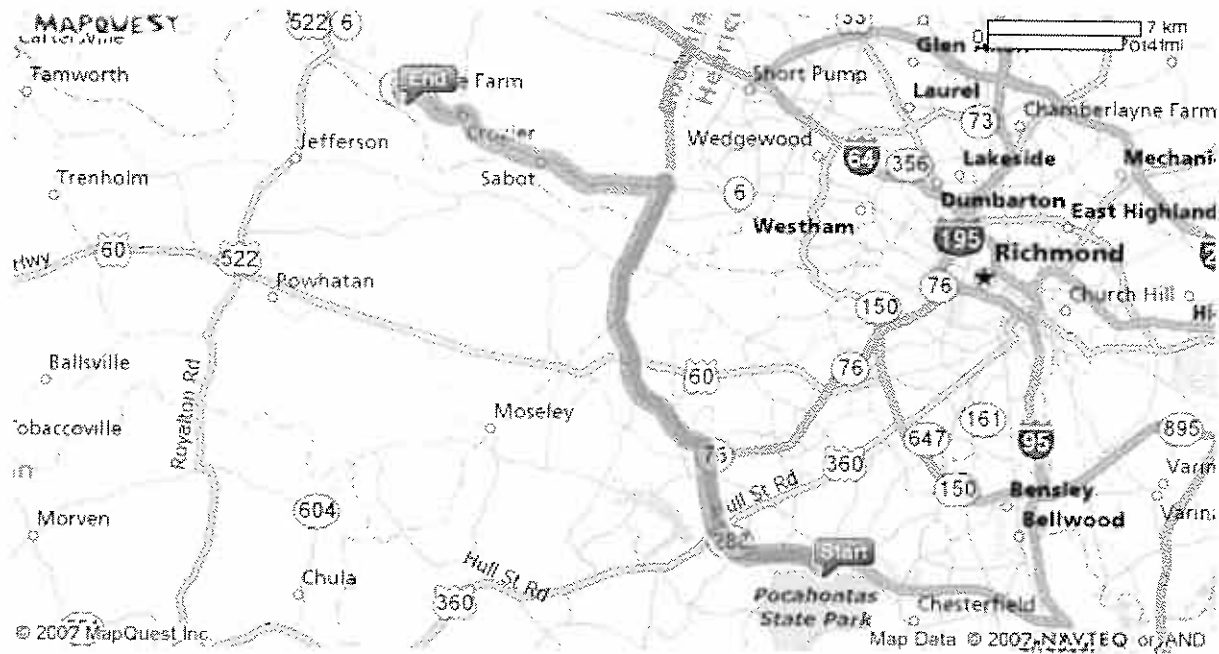
**4:** Turn LEFT onto STATE FARM RD / VA-310. 0.1 miles



**5:** End at [1900-2011] State Farm Rd  
Maidens, VA 23102, US

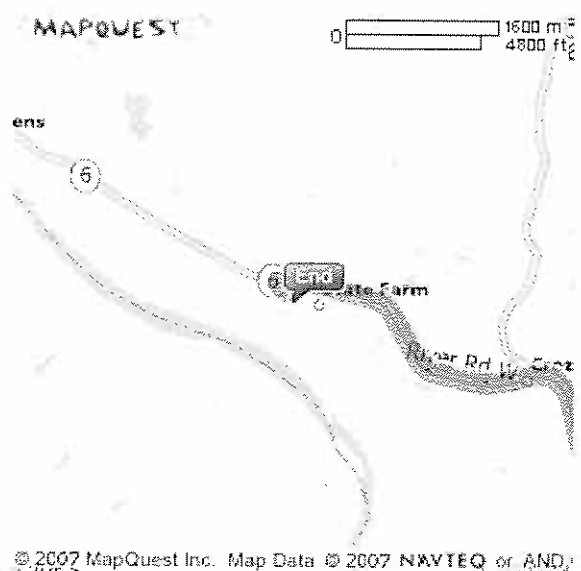
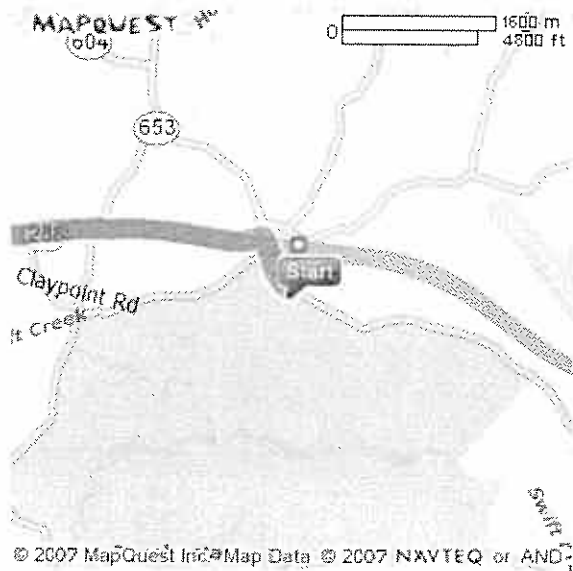
**Total Est. Time:** 33 minutes

**Total Est. Distance:** 29.64 miles



**Start:**  
**6900 Courthouse Rd**  
 Chesterfield, VA 23832-5309, US

**End:**  
**[1900-2011] State Farm Rd**  
 Maidens, VA 23102, US



All rights reserved. Use Subject to License/Copyright  
 These directions are informational only. No representation is made or warranty given as to their content, road conditions or route usability or expeditiousness. User assumes all risk of use. MapQuest and its suppliers assume no responsibility for any loss or delay resulting from such use.